

are near the flagellate source of the Sporozoa, and from thence as a main stem arise the Trypanosomes, Coccidians, Gregarines, Haemogregarines. He feels also that the Euglenids may give rise to lines leading to Cystoflagellates and Ciliates.

AN AMEBA WITH TENTACLES

Collin (*Arch. Zool. Exp. N. & R.*, No. 4, 1912) describes a new protozoan combining the characters of Ameba and the Suctorina. The organism has a gelatinous covering whose form is easily changed, and possesses tentacles by which it attaches itself to objects. It has the nuclear and pseudopodial structure of the Ameba. It is a marine form occurring in a culture of seaweed along with other amebæ and Foraminifera.

SOME AMERICAN RHIZOPODS AND HELIOZOA

Wailes (*Jour. Linn. Soc.* Dec. 17, 1913) reports 161 species and varieties of Rhizopods and 4 species of Heliozoa from collections made in 1911 at Augusta, Georgia, in New Jersey, and at various points in New York. Comment is made upon the small amount of work done on the American species of these groups since the time of Leidy.

Of these, 5 species and 10 varieties are new. Forty of them are recorded for the first time from the United States. About 80% of the species are similar to those found in Europe. The remainder are made of species rarely or not at all found in Europe. The author states that considerable local variation exists in some of the species.

SIZE OF CHROMOSOMES AND PHYLOGENY

Meek (*Jour. Linn. Soc.* Sept. 24, 1912), thru a study of the diameters of chromosomes, has reached the conclusion that there are three diameters of chromosomes found in animals,—.21 μ in Protozoa, .42 μ in low Metazoa, and .83 μ in high Metazoa. He holds that these measurements are remarkably constant. This arithmetic progression is believed by him to mean a lateral fusion of these chromatic elements in phylogeny.

In respect to length, the author finds, by study of spermatogen-